In the sparsely-settled districts or smaller communities the need is the greatest. For deformities and disease-crippling conditions are most likely to be found in the poorer farming regions. Here, where towns are few and far between, physicians scarce and medical care inadequate, early recognition and treatment is often impossible. The extremely deformed cases may attract public attention and be sent to a city hospital, the expense borne by the county or some philanthropic individual. Difficulties in these cases arise owing to the distance from the place of treatment, or infrequency of medical observation and inability to carry out the corrective exercises or muscle training. The many opportunities of the city child are all denied the country child.

The treatment of these cases necessitates good hospital facilities, daily observation, adjustable braces, muscle training, corrective exercises over a long period of time. The modern medical knowledge of to-day can do much to correct deformities and improve diseased conditions of the bones and joints, and the period of treatment is in many cases greatly reduced; but frequently, and especially in the most severe cases, education can not be carried on during this time, on account of the inability to go to the ordinary school. The best treatment is the only treatment for these cases. Therefore an institution should be established for the treatment, care and education of these children. Any indigent child who may have resided within the State of California for not less than one year, who is crippled or deformed, or suffering from disease through which he is likely to become crippled or deformed, the disease or deformity amendable to treatment, should be eligible. The application for admission should include an affidavit as to the financial status of the parents, or guardian, and a statement as to the deformity and condition of the patient by the physician. Here an effort would be made to correct the deformity. Treatment continued as long as necessary, constantly under the observation of skilled physicians. Proper nourishment given, and according to ability to receive instruction, the educational side carried on in a most thorough and expeditious manner. In directing the treatment to ultimate cure, attention given so that the boy or girl departing takes with him or her a trade sufficiently learned to be self-supporting.

Under the present arangement, the care of these cases is hit or miss. Those cases receiving treatment are helped in proportion to the interest of parents, the ability of the clinics to hold the patient during the long period of treatment, and the activity and alertness of the Social Service to keep in touch with the patient, assisting the whole family in many and diverse ways to accomplish the one object, namely, the correction of the child's deformity. The element of education is often neglected, and the possibility of self-support in after life is a questionable matter.

Therefore the establishment of a state hospital school for crippled and deformed children will mean the best medical efficiency to the patient, to his family, the community and thereby to the state.

DEATH FROM ACCIDENTAL POISONING BY CARBOLIC ACID.

U. S. Flagship "Pensacola" (2nd Rate)
Panama, February 23, 1872.

Thomas Russell, Nurse, age 23 years, native of Ireland.

The following is a correct account of the affair as far as can be ascertained, viz:

About 4:50 o'clock this p. m. the Apothecary, Chas. O. Hanlon, and Russell, were engaged in arranging the medicines on one of the shelves in the locker in the Dispensary of this ship; the Apothecary turned towards the door to speak to one of the men, and while speaking, his back was toward Russell, who continued his work. The Apothecary states that his back was not turned longer than ten seconds, when hearing an unusual noise behind him, he turned immediately, and seeing Russell in the act of falling, he caught him, laid him down, and sent at once for assistance. Dr. Flint and myself were in the sick bay, we repaired immediately to the Dispensary, seeing the patient within one or actually two minutes, he was then totally insensible; pulseless. Pupils dilated, the respirations were of a gasping character, face pallid and pinched, and, there had been an involuntary discharge of urine. The interval between the respiratory acts became longer, and, after one or two partial efforts, life ceased, respiration continuing for several seconds after the cardiac impulse ceased to be perceptible. There were no convulsions nor vomiting, nothing beyond the condition above described. The fatal event occurred so rapidly that there was not sufficient time for the manifestation of any further symptoms, nor was there an opportunity for the exhibition of any remedial measures. The fatal event occurred in about three minutes from the time the Apothecary heard the first noise.

There was a strong odor of carbolic acid in his breath, but no trace of it about his lips or face. Upon examining the medicines upon the shelf, a bottle of the capacity of one pint, and about two-thirds full of "Acid Carbolic Impure," as furnished by the U. S. Naval Laboratory, was found without the cork in it. As no one saw him drink anything, and as he did not speak or show any signs of consciousness, the natural inference was that, the moment the Apothecary turned away, he hurriedly took up the bottle and swallowed some of its contents by mistake for some stimulant. He was in the habit of drinking whenever an opportunity occurred, and on this account he was never allowed to dispense liquor. The supposition of the accidental origin of the poisoning was strengthened by the fact that a bottle of the same size, containing Tinct. of Ginger was found standing close to the Carbolic Acid, and, as the allowance of Tinc. of Ginger had been nearly used, and could not be accounted for in a legitimate way, it is more than likely that he had been in the habit of taking it, and intended so doing upon this occasion. It was impossible to ascertain the quantity swallowed, but from the manner in

which it was done, it is likely that not more than one ounce was taken.

The body was allowed to remain during the night, a small quantity of ice being placed on the abdomen.

February 24.—Post mortem examination was made at 6 o'clock this morning, thirteen hours after death, rigor mortis well marked, body well nourished, skin pallid, with some post mortem discoloration along the back, no evidence of commencing decomposition. Owing to the inconvenience attending such examinations on board ship, although every facility was afforded me, it was concluded only to examine the stomach and brain.

Upon opening the abdomen, the odor of the Carbolic Acid was very perceptible, and the viscera were in a good state of preservation. The stomach was moderately distended, and intensely congested externally, being of a dark venous hue, it was removed entire, after ligating its cardiac and pyloric extremities. Upon being opened it was found to contain about one pint of a whitish colored liquid, smelling strongly of the acid, and some undigested food having also the same odor. After removing the contents, the whole of the mucous lining gave positive evidence of the corrosive effect of the poison, showing the characteristic white appearance seen after the local application of the undiluted acid. Beneath this white film, the mucous membrane was intensely congested, of a chocolate color, strongly corrugated and much more rigid and tougher than normal. This condition was especially well marked in the oesophagus, in the cardiac extremity and along the greater curvature, and to a less degree along the lesser curvature and at the pyloric extremity, although no part of the inner surface had entirely escaped.

The skull was opened in the usual manner. The scalp and meninges of the brain were very much congested, the vessels being filled with fluid blood of a dark color. There was no effusion of blood or serum either beneath the membranes nor in the ventricles, and with the exception of a very few bloody points of small size in the cerebrum, and some infection of the choroid plexus, the remainder of the cranial contents seemed to be in a normal condition.

The most marked feature in this case, was the rapidly fatal result, it might be almost termed "instantaneous," as from the most careful estimate, not more than three minutes could have elapsed from the swallowing of the acid until death ensued. I scarcely know of any poison capable of producing death in so short a time, except, possibly strong hydrocyanic acid, the symptoms from poisoning from which, I may add, closely resemble those noticed in this case. Having advanced thus far in the history of this interesting case, it may be well to inquire, and if possible, to form some idea of the mode by which Carbolic Acid is capable of destroying life so rapidly.

Two modes have suggested themselves, viz.:

1st—By its powerful irritant effect, applied, as in this case, instantaneously to the whole lining membrane of the stomach and oesophagus, thereby causing "death from shock," in the same manner as a blow upon the epigastrium, or

2nd—After absorption, by its anaesthetic and paralyzing effect upon the sympathetic and pneumogastric nerves and their connections, thereby destroying or suspending their functions, and bringing about cessation of vital action in important organs supplied by them, as the brain, heart and lungs.

It is a well established fact that Concentrated Carbolic Acid when applied to the skin produces decided anaesthesia. Dr. W. H. Jones, U. S. Navy, now attached to this ship, has upon several occasions applied the acid to the skin of his forearm with the effect of lessening its sensibility in about twenty seconds, to such an extent as to allow the part to be fully incised without pain. It has been used on board this ship, upon several occasions for mitigating pain in opening buboes, and always with good effect. If it causes anaesthesia when applied externally, there is no reason why the same effect should not be produced when applied internally, and it therefore seems reasonable to suppose that the rapidly fatal effect of Carbolic Acid, in this case, can be accounted for in satisfactory manner by its anaesthetic and paralyzing effect upon the great nervous center, subsequent to its immediate absorption from the stomach. Had life been prolonged, or the dose been smaller, doubtless, vomiting, purging and other evidences of its action as an irritant poison would have been observed, but as death occurred too rapidly to be caused by its mechanical effect, or corrosive quality, it seems reasonable to infer that the second proposition is probably correct, and the modus operandi of a fatal dose of Carbolic Acid can be referred to the explanation therein contained.

Respectfully submitted,
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Original Articles

THE SURPRISING FREQUENCY OF HYPERTENSION IN A GROUP OF YOUNG DRAFTED MEN.*

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During the last few weeks of draft board work I measured the blood pressures of 264 recruits taken consecutively as they appeared for examination. There were 87 between the ages of 18 and 21, and 167 between 32 and 37. There were a few between 22 and 31. Although the number of cases studied is small, the results are so startling that it seems worth while to report them, if only to raise questions and to stimulate others to make similar studies on larger groups of young people.

The commonly accepted view seems to be that hypertension is a disease of fairly old men who

*Read before the Forty-eighth Annual Meeting of the Medical Society, State of California, Santa Barbara, April, 1919.